Patent Claims:

1. Arrangement for the torque measurement of rotating machine parts with a strain measuring bridge (2) arranged on the rotor, the output signals of which strain measuring bridge are amplified and converted in a voltage-frequency converter (4) into a frequency-proportional signal and are transmitted by means of a transmitter circuit (9) to a stator, characterized in that the voltage-frequency converter (4) is embodied as a synchronous voltage-frequency converter, after which a follow-up synchronization circuit (PLL) (6) is circuit-connected for the suppression of the so-called frequency jitter.

2. Arrangement for the torque measurement according to claim 1, characterized in that the synchronous voltage-frequency converter (4) is driven with a high quartz-controlled frequency, which comprises a multiple of the required carrier frequency, which is provided for a prescribed signal bandwidth, whereby the follow-up synchronization circuit (PLL) (6) is followed by a frequency divider circuit (10), which divides down the output frequency by the multiple.

3. Arrangement for the torque measurement according to claim 2, characterized in that the synchronous voltage-frequency converter (4) is arranged on the rotor side (14), while the follow-up synchronization circuit

(PLL) (6) is provided on the stator side (13), whereby the quartz frequency is produced on the stator side (13) and is inductively transmitted in a synchronized manner to the rotor side (14) with the aid of the transmitter circuit (12) and is supplied to the synchronous voltage-frequency converter (4).